

The relationships of the Madagascan genus *Dromaeocercus* (Sylviidae)

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The genus *Dromaeocercus* Sharpe, 1877, as construed since 1879, consists of 2 species of sylviid warblers, *D. brunneus* Sharpe, 1877 and *D. seebohmi* Sharpe, 1879. Their association, now traditional, may be attributed to their shared characters of long, decomposed rectrices and restriction to Madagascar. In the present article I suggest that these 2 characters have been wrongly emphasized, and that the 2 species in fact belong each to a separate tribe of the Sylviidae, *brunneus* to the Bradypterini and *seebohmi* to the Megalurini. The details of distribution and habits given below are drawn from Sharpe (1883), Milne-Edwards & Grandidier (1883), Delacour (1932a, b), Rand (1936), Lavauden (1937), van Someren (1947), Salvan (1972), Milon *et al.* (1973) and Benson *et al.* (1977). The present article itself is a contribution to a long-term study of the taxonomy of the Sylviidae (Parker in prep.).

D. brunneus, the Brown Emu-tail, is a small, furtive bird of central eastern Madagascar (up to at least 800 m), where it is locally common. It affects the damp substage of heavy forest, feeding on small insects caught near the ground. It is predominantly dark brown above and dull orange-brown below, darker on flanks and crissum, with paler throat and eyebrow; immatures are more rufous below than adults. Its long, strongly graduated tail of ten highly decomposed rectrices constitutes about half its total length (Plate 1). The wings are soft and rounded, with the tenth (outermost) primary very well developed. The bill is fine and the nostrils operculate. The tarsi and toes are relatively long. The plumage is soft and dense. Calls include a *tac-tac-tacatac-tacatac* followed by *tia-tia tic-tic* (Milon *et al.*, possibly the "little rattling call" reported by Rand 1936: 451). Nothing has been reported of its nesting habits.

D. seebohmi, the Grey Emu-tail, is similar to *brunneus* in size and shape, but differs in its coloration, shorter legs and toes, lower tarsus/wing ratio, voice and habitat. It is found in the high country of the central massifs of Madagascar, mostly between 1800 m and 2600 m (once 900 m), where it affects herbage and bushes in small grassy swamps, along streams and at the edges of forest-remnants and also in the adjoining heath and grassland. Like *brunneus* it feeds on small insects. Its upperparts are light grey-brown, the feathers of the crown, nape, back and wings with darker centres (Plate 2), its underparts ashy-white, deepening to olive on sides and crissum, with fine dark streaks on throat and breast. Juveniles (nestlings) are washed yellow below. Like *brunneus* it is a furtive species best located by its voice. Its vocal repertoire was given by Rand as: song a series of rather clear whistles, and a loud chatter repeated continually when disturbed; one bird that had been singing began to chatter, stopped, gave a "curious little rattle" and resumed its singing. van Someren reported low churrings and a sharp *chit* given at the nest. Milon *et al.* gave no precise description of voice, but observed that, though the bird hid itself constantly, it could still be easily located by its strong and constant chatter. Its flight, never more than a few yards at a time, appears heavy and laboured, the long tail drooping; Rand found that when

disturbed it preferred to escape on foot, creeping away through the grass. Two of its nests have been reported (van Someren 1947, Benson *et al.* 1977): both were deep cups of coarse grass placed in tussocks of marsh grass; one was noted as having a lining of finer grass and possessing an approach tunnel of some 3.6 m through the tussock. Both nests contained 2 young.

In erecting *Dromaeocercus* for *brunneus*, Sharpe (1877) compared the species to *Phlexis layardi* (= *Bradypterus victorini*) and the Australian emu-wren *Stipiturus malachurus*, both of them forms with decomposed tails. Subsequently, and following the description of *D. seebohmi*, Sharpe (1883) placed *Dromaeocercus*, *Stipiturus* and *Phlexis* in the group Bradypteri of his subfamily Timeliinae, the first 2 together between *Sphenoeacus* and *Psamathia*, and *Phlexis* several genera further on. Sharpe's Bradypteri or "aberrant Reed-Warblers" comprised 19 genera, of which 15 are still retained in the Sylviidae, where they are currently distributed among 4 tribes. Of the remaining 4, all Australian, *Sphenura* (= *Dasyornis*) and *Origma* are now placed in the Acanthizidae (Schodde 1975, Sibley & Ahlquist 1982) and *Amytis* (= *Amytornis*) and *Stipiturus* in the Maluridae (Harrison 1969, Sibley & Ahlquist 1982). Sharpe's *Sphenoeacus* consisted of forms now constituting the African *Sphenoeacus afer* (Megalurini) and the New Zealand *Bowdleria punctata*, a species of unresolved relationships associated by Delacour (1942: 513) with *Megalurus* and *Sphenoeacus*, but which in fact shows equally impressive external resemblances to the Australian species *Calamanthus fuliginosus* (Acanthizidae). *Psamathia*, of Micronesia, appears very closely related to the bradypteryne genus *Cettia* (Delacour 1942, Baker 1951: 251, Parker in prep.).

Slater (1930: 574), possibly in resignation, placed *Dromaeocercus* at the very end of the African Sylviidae, immediately behind the Mascarene genus *Bebrornis* (which latter is probably congeneric with *Acrocephalus*—see Hall & Moreau 1970: 157). No other modern workers, with the exception of Neumann and of Delacour (see below), appear to have passed any comment or judgement on the taxonomic position of *Dromaeocercus*.

The genus *Dromaeocercus* has never been satisfactorily diagnosed. Within his Bradypteri, Sharpe (1883: 93) keyed it out in 3 steps to a couplet including *Sphenoeacus* (= modern *Sphenoeacus* + *Bowdleria*, see above): "a. With ten tail-feathers.

a'. Tail-feathers stiffened with spiny shafts and loose webs, the latter lax and separate.

a''. Tail about equal in length to the body of the bird; no perceptible rictal bristles."

From "*Sphenoeacus*" he distinguished *Dromaeocercus* by the latter's more slender bill. *Stipiturus* (now in the Maluridae) he distinguished from "*Sphenoeacus*" and *Dromaeocercus* by its tail being much longer than its body (this was before the discovery of *S. ruficeps*), and its rictal bristles very strong. What seem to have prompted subsequent authors to maintain Sharpe's delimitation of *Dromaeocercus* (and arguably the strongest influences upon Sharpe himself) are the similar long, decomposed tails of the 2 species and their geographical restriction to Madagascar (Traylor *in litt.* 8 Dec. 1982). Indeed, in the absence of these 2 characters, it seems highly improbable that *brunneus* and *seebohmi* would ever have been thought of as related, let alone made the occupants of a single genus.

Concerning the endemicity of both *brunneus* and *seebohmi* to Madagascar,

I regard this point as inadmissible to the taxonomic argument. To my mind, biogeographical conclusions must be drawn from taxonomic conclusions, not *vice versa*. To reverse this order would invalidate the resulting taxonomy as a basis for further biogeographical studies.

As for the significance of the long, decomposed tailfeathers, this character has arisen independently in such unrelated genera as *Sylviorthorhynchus* (Furnariidae) and *Stipiturus* (Maluridae), and so cannot be considered as invariably indicating close relationship. There are indications that decomposed rectrices may in some instances be an adaptation to wet or humid conditions. For instance, this condition is far more pronounced in the hygrophilous *Stipiturus malachurus* than in the aridicolous *S. ruficeps*. In addition, *D. brunneus* and the similar *Bradypterus barakae* (see below) have both been reported as being habitually bedraggled with moisture (Delacour 1942). As for *Sylviorthorhynchus desmursii*, this species "is normally a bird of the very dense underbrush of humid temperate forest, especially where favoured by secondary growth, and frequents as a rule virtually impenetrable thickets . . . preferably along or in the near vicinity of streams and lakes" (Vaurie 1980: 55).

If, therefore, the endemicity of *D. brunneus* and *D. seebohmi* to Madagascar is inadmissible to the taxonomic argument (which it is), and if the possession by these 2 species of long, decomposed rectrices is attributable to convergence (possibly as an adaptation to wet or humid environments), then the question of the species' relationships to each other requires to be re-examined. Were it not for their unusual tails, then, in my opinion, from the beginning *brunneus* would have been placed in *Bradypterus* and *seebohmi* in or near *Megalurus*.

Neumann (1920) proposed for *Bradypterus barakae* Sharpe the new genus *Sathrocercus*. Of it he wrote: "In every respect a connecting link between the genera *Bradypterus* Sw. and *Dromaeocercus* Sharpe. In coloration resembles *Dromaeocercus* [obviously he meant only *D. brunneus*] more than any species of *Bradypterus*. Tailfeathers not of the normal form, but appearing very finely worn to shreds, abraded, approximately halfway between a normal sylviid tail and the hairfeather-tail of *Dromaeocercus* . . . Perhaps *Bradypterus lopezi* Alex. also belongs here."

Delacour (1942) also noted the similarity between *D. brunneus* and *B. barakae*, but retained the latter in *Bradypterus*. Mackworth-Præd & Grant (1955, 1963) recognized *Sathrocercus*, including in it not only *barakae* and *lopezi* but also *mariae* and *cinnamomeus*, while retaining the fuller-tailed forms such as *barratti* and *babaecala* in *Bradypterus*. Sclater (1930) and Hall & Moreau (1970), however, retained the *Sathrocercus*-group in *Bradypterus*, the latter authors moreover regarding all its forms as conspecific with *B. barratti*.

Whatever the species-boundaries within this group are finally determined to be, there exists in the character of the tailfeathers a morphocline. As noted by Delacour (1942) as well as Neumann (1920), *Dromaeocercus brunneus* very much resembles *B. barakae*, from which it differs in its longer, more decomposed rectrices. Yet the tail of *barakae* is itself intermediate in these respects between those of *brunneus* and *lopezi*; in fact, the tail of *brunneus* can be envisaged as the end-form of a morphocline extending from the full-tailed species of *Bradypterus* (*sensu stricto*) through the "*Sathrocercus*"-group (Plate 1). *Brunneus* is also extremely similar in coloration and general appearance to forms of the "*Sathrocercus*"-group. With regard to voice, it is true that both *brunneus* and *seebohmi* are reported as having chattering calls, but the

only person to have explicitly likened their calls to each other (Rand 1936) had never personally heard *brunneus*, and was possibly going by native reports. In fact, the call of *brunneus* reported by Milon *et al.* compares very favourably in its transliteration to the rattling call described in Mackworth-Praed & Grant (1955: 376) for *Bradypterus mariae*, “*tac-tac-tacatac-tacatac, tia-tia tic-tic*” and “*tiku-tiku-tiku-tic*” respectively. In addition, the tarsus/wing ratio of *brunneus* is relatively high as in the *Sathrocercus*-group, whereas that of *seebohmi* is relatively low (Table 1, and below), though this may signify no

TABLE I

Tarsus/wing ratios of *Bradypterus* spp., *Amphilais seebohmi* and *Megalurus* spp.; sample sizes given in parentheses.

<i>Bradypterus</i>		<i>Amphilais</i>	
(‘ <i>Dromaeocercus</i> ’) <i>brunneus</i>	0.388–0.468 (6)	(‘ <i>Dromaeocercus</i> ’) <i>seebohmi</i>	0.347–0.388 (6)
<i>B. (Sathrocercus) barakae</i>	0.383–0.418 (5)	<i>Megalurus gramineus</i>	0.354–0.380 (6)
<i>B. (S.) lopezi</i>	0.393–0.439 (5)	<i>M. pryori</i>	0.340–0.373 (6)
<i>B. (S.) cinnamomeus</i>	0.373–0.432 (6)	<i>M. timoriensis</i>	0.363–0.403 (5)
<i>B. (Bradypterus) barratti</i>	0.323–0.377 (6)		
<i>B. (B.) babaecala</i>	0.383–0.439 (6)		

more than that the relatively longer-legged *brunneus* is more terrestrial than *seebohmi* (cf. Galbraith & Parker 1969, Vaurie 1953, and Gaston 1974). Be that as it may, the sum of the above considerations leaves little impediment to the placing of *brunneus* in the genus *Bradypterus*, a course I here recommend.

My belief that *brunneus* should be regarded as a species of *Bradypterus* in no way extends, however, to its alleged congener *seebohmi*. As Delacour (1942) pointed out, *seebohmi* has, unlike any of the *Bradypterini*, streaked upper-parts (Plate 2). “It does not seem possible, however,” he continued, “to separate generically the two species of *Dromaeocercus* [sic] . . . which provides, therefore, a connection between the plain-backed *Cettia-Bradypterus* and the streaked-backed . . . *Megalurus-Bowdleria* group . . .”. It could be argued that dorsal streaking is commonplace among swamp-dwelling forms, and therefore that this difference between *brunneus* and *seebohmi* is insufficient to separate them generically, let alone tribally. But commonplace as it may be, the character is not universal among swamp-living birds, and I regard it as significant that in particular it is absent from the swamp-dwelling bradypterines *B. babaecala*, *B. grandis* and *B. carpalis*. In this particular case, I place greater taxonomic significance upon the presence or absence of dorsal streaking than on the similarity between the tail-feathers, and therefore regard the streaked dorsum of *seebohmi* as justifying the exclusion of this species from the *Bradypterini*. It may be of interest to note here that Benson & Irwin (1975) similarly used a single character-state (the presence or absence of a pale or contrasting patch on the underside of the primaries) as initial evidence for the exclusion from the Pycnonotidae or “*Phyllastrephus*” (now *Crossleyia*) *xanthophrys* and ‘*P.*’ (now *Modulatrix*) *orostruthus*.

As noted above, were it not for its unusual tail, *seebohmi* would probably early have been placed in or near *Megalurus*. In its appearance it shows strong resemblances to certain species of *Megalurus* and *Locustella* (Plate 2). The accounts of its nest, song, calls and general behaviour recall in particular those of *Megalurus gramineus*, the Little Grassbird of Australia and New Guinea. In addition, the vocal repertoire given by Rand (as heard by him) for *seebohmi* is strikingly reminiscent of that of *M. gramineus*. Moreover, the

tarsus/wing ratio of *seebohmi* is relatively low as in *Megalurus*, whereas that of *brunneus* is relatively high as in the *Sathrocercus*-group (see above).

From Sharpe's linking of "*Dromaeocercus*" with "*Sphenoeacus*" (modern *Sphenoeacus* and *Bowdleria*) and *Stipiturus* in his key ("a'. Tail-feathers stiffened with spiny shafts and loose webs, the latter lax and separate"), it might be inferred that decomposition of the rectrices to the degree found in *seebohmi* was already known in the Megalurini. While Sharpe's comparison may hold for *Stipiturus malachurus* and, to a lesser extent, some specimens of *Bowdleria*, however, it is a poor and misleading one in the case of *Sphenoeacus afer*, whose rectrices, though narrow, are relatively close-webbed and not comparable to the loose webbing found in *seebohmi* or *brunneus*. In fact, amongst the Megalurini (in which I provisionally include the currently recognized genera *Locustella*, *Megalurus*, *Graminicola*, *Chaetornis*, *Laticilla*, *Sphenoeacus*, *Melocichla*, *Cincloramphus*, *Megalurulus*, *Schoenicola* and *Eremiornis*, but not *Achaetops*, *Buettikoferella* or *Rhopophilus*), no species has loose-webbed rectrices, though several, including *Megalurus palustris* and *M. gramineus*, sometimes have the webs narrowed by extreme wear. Certainly, unlike the case of *brunneus vis-à-vis* *Bradypterus*, no morphocline exists to link *seebohmi* to *Megalurus* or any other megalurine genus in this character.

On present evidence, I regard *seebohmi* as a member of the Megalurini, possibly closest to *Megalurus*, but in any event sufficiently distinctive to require a separate genus. The type-species of *Dromaeocercus* being *brunneus*, and no other generic name being available, I therefore propose:

Amphilais, gen. nov.

Type-species. *Dromaeocercus seebohmi* Sharpe, 1879.

Diagnosis. Resembles *Megalurus* (especially *M. gramineus*) and *Locustella* (especially *L. naevia*) (see Plate 2), differing from the former by its finer, glossier plumage and subtler, less contrasting markings, from the latter by its much shorter upper- and under-tailcoverts, rounded wing, longer tenth primary and apparent lack of grasshopper-like song, and from both by its relatively much longer, more graduated and highly decomposed tail.

Constitution. The type-species only, *Amphilais seebohmi* (Sharpe, 1879).

A. seebohmi is not the first species to have been transferred from the Bradypterini to the Megalurini. A previous example is the species now known as *Megalurus pryri* (Delacour 1942: 513).

All species of *Locustella* being migratory, and some species of *Megalurus* being migratory or highly nomadic, the question arises whether *A. seebohmi* is an ancient Madagascan endemic or has evolved relatively recently from long-range colonists from, perhaps, Eurasia. Further studies in the taxonomy of the Megalurini may decide this question. At this juncture I consider it likely that *Amphilais* is most closely related to *Megalurus* and that it constitutes a further example of the "Indian" element of the Madagascan avifauna listed by Rand (1936: 298).

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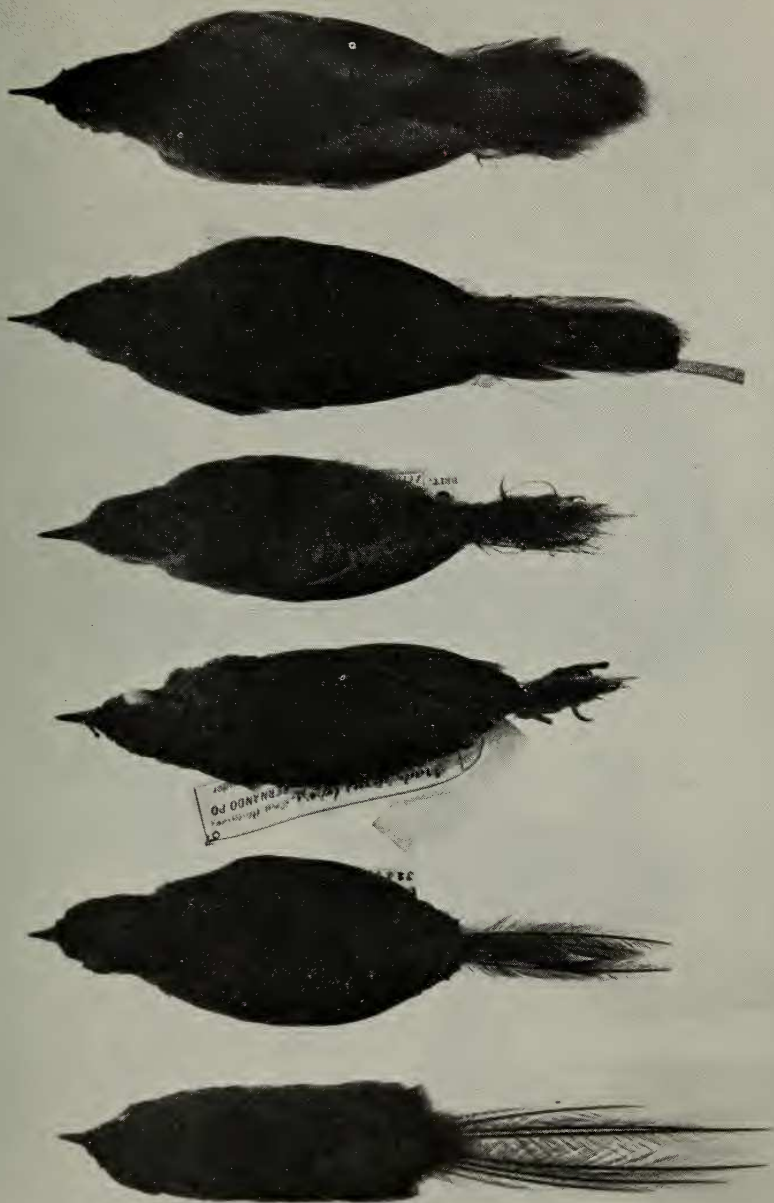


Plate 1. From top to bottom: *Bradypterus* ('*Dromaeocercus*') *brunneus*, *B. barakae*, *B. lopezi*, *B. cinnamomeus*, *B. barratti* (*cathkinensis*), *B. babaecala*, emphasising the tail traceries. (See Parker).



Plate 2. From top to bottom: *Amphilais* ('*Dromaeocercus*') *seebohmi*, *Locustella naevia*, *Megalurus gramineus*, *M. pryeri*, *M. timoriensis*. (See Parker).